PTO/SB/52 (02-01)
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REISSUE APPLICATION DECLARATION B	Y THE ASSIGNEE Docket Number (optional) 1004-75						
I hereby declare that:							
My residence and mailing address and citizenship are s	stated below next to my name						
I am authorized to act on behalf of the following assigne	ee: — as represented by the Minister of 1						
and the title of my position with said assignee is:	ector Natural Resources Division						
The entire title to the patent identified below is vested in	n said assignee.						
Name of Patentee(s): Her Majesty in Right of Canada as Represented by the Minister of Natural Resources							
Patent Number 6,073,478	Date of Patent Issued June 13, 2000						
Title of Invention HYDROGEN SENSOR USING A SELECTROYTE	SOLID HYDROGEN ION CONDUCTING						
I believe said patentee(s) to be the original, first and so	ole/joint inventor(s) of the subject matter which is						
described and claimed in said patent, for which a reissu HYDROGEN SENSOR USING A SOLID HYDROGEN							
the specification of which							
x is attached hereto.							
was filed on as reissue application number / and was amended on							
(If applicable)							
I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.							
I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.							
I verily believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below. (Check all boxes that apply.)							
by reason of a defective specification or drawing.							
X by reason of the patentee claiming more or less than he had the right to claim in the patent.							
by reason of other errors.							
At least one error upon which reissue is based is described as follows:							
Applicant disclosed palladium in the application and failed to claim it.							
[Attach additional sheets, if needed.]							
All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant.							

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 0.5 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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REISSUE APPLICATION DECLARATION BY THE ASSIGNEE				Docket Number (Optional) 1004-75					
I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith. Name(s) Registration Number Robert A. Wilkes 28170									
Robert G.	Hendry	229	927						
Harold C.	Baker	19:	333						
Correspondence	e Addres	ss: Direct all communications abou	t the ap	plicatio	n to:				
Customer N	umber		_				e Custo ber Ba	omer r Code	
OR		Type Customer Number Here	-		Į	Labe	l Here	,	
Firm or Individual Name		Shapiro Cohen					-		
Address		P.O. Box 3440							
Address		Station D							
City		Ottawa	s	tate	01	N	Zip	K1P 61	21
Country		Canada						-	• 9
Telephone		613 232 5300	F	ax	6:	13 23	32 92	31	
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.									
Full name of per	rson sigi	ning (given name, family name)							V
Signature Date					$\overline{}$				
Cignatare	enny	le Hollingtons.				/"/	13		X
Address of Assignee 580 Booth Street, 16th Floor, Ottawa, Ontario, Canada, K1A 0E4									
Patentee Her Majesty in Right of Canada as Citizenship									
Residence/Maili 580 Booth S	ng Addre Street	, 16th Floor, Ottawa, Or	ntario	, Can	nada	, к1	A OE	4	
Patentee				Citizo	enshi	р			
Residence/Mailing Address									
Additional Patentees are named on separately numbered sheets attached hereto.									

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REISSUE APPLICATION DECLARATION BY THE INVENTOR	Docket Number (Optional) 1004-75
As a below named inventor, I hereby declare that: My residence, mailing address and citizenship are stated below ne I believe I am the original, first and sole inventor (if only one name joint inventor (if plural names are listed below) of the subject matte in patent number 6,073,478 granted June 13, 20 reissue patent is sought on the invention entitled Hydrogen Ser Ion Conducting Electrolyte the specification of which	is listed below) or an original, first and r which is described and claimed 000, and for which a
is attached hereto.	
was filed onas reissue application no and was amended on	umber/
(If applicable)	
I have reviewed and understand the contents of the above identifies as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to 37 CFR 1.56. I verily believe the original patent to be wholly or partly inoperative below. (Check all boxes that apply.)	patentability as defined in
by reason of a defective specification or drawing.	·
X by reason of the patentee claiming more or less than he had t	he right to claim in the patent.
by reason of other errors.	
At least one error upon which reissue is based is described below. reissue, such must be stated with an explanation as to the nature of	
Applicant disclosed palladium in the applicat	cion and failed to claim it.
	· .

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(REISSUE APPLICATION DECLARATION BY THE INVENTOR, page 2) Docket Number (Optional) 1004-75					nal)			
All errors corrected in this reissue application arose without any deceptive intention on the part of the applicant. As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith.								
Name(s) Registration Number Robert A. Wilkes 28170								
Robert G. Hei				- 				
Harold C. Baker 19333								
Correspondence Address: Direct all communications about the application to:								
Customer Number Type Customer Number here Place Customer Num Code Label here					er Bar			
Firm or Individual Name	Sha	apiro Cohen						
Address	P.(). Box 3440						
Address	Sta	ation D						ate.
City	0t1	tawa	State	OI	Ŋ	Zip	K1P	6P1
Country	Car	nada						
Telephone	613	3 232 5300	Fax	(613 23	2 9231		
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed. Full name of sole or first inventor (given name, family name) Areekattuthazhayil K. Kuriakose								
Inventor's signature A. IE. Emile			Date Nov. 7, 2001					
Residence 2 Muirfield Gardens			Citizenship Canadian					
Mailing Address $_2$ I	Muirfie	eld Gardens, Nepean, (Ontario, C	anada	a, K2R	1B8		
Mailing Address 2 Muirfield Gardens, Nepean, Ontario, Canada, K2R 1B8 Full name of second joint inventor (given name, family name) Nicola Maffei								
Inventor's signature	. ^ .	Malli	Date 2	NI.		2.00		
Residence 19		ness Avenue	Citizenship	100	Canad		ļ	
Mailing Address 19 Inverness Avenue, Nepean, Ontario, Canada, K2E 6N6								
Full name of third joint inventor (given name, family name)								
Inventor's signature Date								
Residence			Citizenship					
Mailing Address								
Additional joint inver	ntors are na	amed on separately numbered sheets	attached hereto.					

PTO/SB/53 (02-01)
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REISSUE APPLICATION: CONSENT OF ASSIGN	IEE; Docket Number (Optional)					
STATEMENT OF NON-ASSIGNMENT	1004-75					
	-ining! potent identified below					
This is part of the application for a reissue patent based on the o						
Name of Patentee(s) Her Majesty in Right of Canada as Represented by the Minister of Natural Resources						
Patent Number 6,073,478	Date Patent Issued June 13, 2000					
Title of Invention HYDROGEN SENSOR USING A SOLID HYDROGEN ION CONDUCTING ELECTROLYTE						
1. X Filed herein is a statement under 37 CFR 3.73(b).	(Form PTO/SB/96)					
2. Ownership of the patent is in the inventor(s), and n	o assignment of the patent is in effect.					
One of boxes 1 or 2 above must be checked. If multiple assignees, complete this form for each assignee. If box 2 is checked, skip the next entry and go directly to "Name of Assignee". The written consent of all assignees and inventors owning an undivided interest in the original patent is included in this application for reissue.						
The assignee(s) owning an undivided interest in said original patent is/are, and the assignee(s) consents to the accompanying application for reissue.						
Name of assignee/inventor (if not assigned) Her Majesty in Right of Canada as Represented by the Minister of Natural Resources						
Signature Serieu Houngton	Date 2001/11/13					
Typed or printed name and title of person signing for assignee (
JENNIFER HOLLINGTON, DIRECTOR MANAGEMENT SERVICES DIVISION	oF					
MANAGEMENT SERVICES DIVISION						

Burden Hour Statement: This form is estimated to take 0.1 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/96 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

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STATEMENT UNDER 37 CFR 3.73(b)				
Her Majesty in Right of Canada as Represented	ļ			
Applicant/Patent Owner:by the Minister of Natural Resources	- [
Application No./Patent No.: 6,073,478 Filed/Issue Date: June 13, 2000 Hydrogen Sensor Using a Solid Hydrogen Ion Conducting Electrolyte	.			
Her Majesty the Oueen in right of				
Her Majesty the Queen in right of Government agency Canada, as represented by the a Government agency				
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) Minister of Natural Resources				
states that it is:				
1. X the assignee of the entire right, title, and interest; or				
2. an assignee of less than the entire right, title and interest. The extent (by, percentage) of its ownership interest is%				
in the patent application/patent identified above by virtue of either:	ı			
A. [] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.				
OR				
B. [x] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:				
Areekattuthazhayil K. Kuriakose, Her Majesty in Right of Canada 1. From: Nicola Maffei To: Natural Resources	as			
THE QUUINTERN WAS RECORDED IN THE LIMITER States Datent and Trademont China at				
Reel00994, Frame0607, or for which a copy thereof is attached.				
2. From:To:				
The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.	ı			
3. From:To:				
The document was recorded in the United States Patent and Trademark Office at				
Reel, Frame, or for which a copy thereof is attached.	-			
[] Additional documents in the chain of title are listed on a supplemental sheet.	1			
[] Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]				
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.				
	1			
November 27, 2001 Robert A. Wilkes Date Typed or printed name	1			
(A) '(1	Ì			
Signature				
Agent of record				
Title	1			

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AUGUST 05, 1999

PTAS

SHAPIRO, COHEN ROBERT A. WILKES 112 KENT ST. SUITE 2001, P.O. BOX 3440, STATION D OTTAWA, ONTARIO CANADA K1P 6P1

S DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231



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RECORDATION DATE: 06/03/1999

REEL/FRAME: 009994/0607

NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

₩

KERIAKOSE, AREEKATTUTHAZHAYIL K. DOC DATE: 09/18/1998

ASSIGNOR:

MAFFEI, NICOLA

DOC DATE: 09/18/1998

ASSIGNEE:

HER MAJESTY IN RIGHT OF CANADA AS REPRESENTED BY THE MINISTER OF NATURAL RESOURCES 580 BOOTH STREET 16TH FLOOR OTTAWA, ONTARIO, CANADA K1A 0E4

SERIAL NUMBER: 09016391

PATENT NUMBER:

FILING DATE: 02/02/1998

ISSUE DATE:

JACQUELINE MOORE, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

Robert A. Wilkes
Name of Person Signing

RDATION FORM COVER SPET PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

ial 101057793 On Payents and Trademarks: Please record the attached original documents or copy thereof. JUN - 3 1999 2. Name and address of receiving party(ies) 1. Name of conveying party(ies): Areekattuthazhayil K. RIAKOSE Name: Her Majesty in Right of Canada and Nicola MAFFEI As Represented By The Minister Of Internal Address: Natural Resources Additional name(s) of conveying party(les) attached?

Yes X No 580 Booth Street, 16th Floor 3. Nature of conveyance: X Assignment Merger Street Address: ☐ Security Agreement Change of Name __StateO<u>ntario</u>ZIP:<u>KlA 0E</u>4 ☐ Other Execution Date: September 18, 1998 Additional name(s) & address(es) attached?

Yes

No 4 Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) 09/016,391 Additional numbers attached? Q Yes X No Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: 7. Total fee (37 CFR 3.41).....\$ 40.00 Name: SHAPIRO, COHEN Internal Address: Suite 2001, 112 Kent St. Inclosed P.O. Box 3440, Station D Authorized to be charged to deposit account Street Address: 8. Deposit account number: City: Ottawa State: Ontarion: KlP 6P1 (Attach duplicate copy of this page if paying by deposit account) 04/1999 DNGUYEN 00000224 09016391 DO NOT USE THIS SPACE 9. Statement and signature. ₹ó the best of my knowledge ang belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Signature

Total number of pages including cover sheet, attachments, and document:



SHAPIRO COHEN BARRISTERS AND SOLICITORS PATENT AND TRADE MARK AGENTS

FILE NO.: 1004-30 U.S.A.

PATENT APPLICATION ASSIGNMENT

IN CONSIDERATION OF One Dollar (\$1.00), and other good and valuable consideration, the receipt of which is hereby acknowledged, paid to

Areekattuthazhayil K. KURIAKOSE, and Nicola MAFFEI

hereinafter referred to as the Inventors, whose full post office addresses are 2 Muirfield Gardens, Nepean, ON K2R 1B8 (CA), and 37 Stevenson Ave., Apt. #1, Ottawa, ON K1Z 6M9 (CA) RESPECTIVELY, the said Inventors hereby sell and assign to

19 INVERNESS AVE, NEPEAN, ONT K 2E 6 N6

HER MAJESTY IN RIGHT OF CANADA AS REPRESENTED BY THE MINISTER OF NATURAL RESOURCES

whose full post office address is: 580 Booth Street, 16th Floor, Ottawa, Ontario K1A 0E4 (CA); all their right, title, and interest in the United States of America, and all other foreign countries, in and to the invention relating to

HYDROGEN SENSOR USING A SOLID HYDROGEN ION CONDUCTING ELECTROLYTE

as described in the proposed Application serial number 09/016,391 filed February 2, 1998 for a patent for such invention, executed by me on December 29, 1997, and to all the Inventors' corresponding, title and interest in and to the invention disclosed in the aforesaid United States Patent Application, both in the United States and all other foreign countries, the Inventors' corresponding right to claim priority from the aforesaid United States Application in any other foreign country, and in any patent or patents which may issue thereon.

THE SIGNATORIES HERETO also authorize Robert A. Wilkes, Registration No. 28,170, of the firm of SHAPIRO, COHEN to correct errors in this Assignment or to insert any further identification or information necessary or desirable to make this Assignment recordable.

SIGNED AT Ottawa	
this 18 day of September	
Areekattuthazhayil K. KURIAKOSE	George May and (Witness)
N. Mallei	Grove Mei) outil
Nicola MAFFAI	(Witness)